

Northeast Nature Notes

News and Events from the Missouri Department of Conservation • Oct/Nov/Dec 2012



Tracking a New Wildlife Disease

White-nose syndrome in bats

While chronic wasting disease in deer is a common topic of conversation in northeast Missouri these days, there is another, less appreciated animal threatened by disease in the area—bats. White-nose syndrome is a newly discovered disease in bats. It affects bats when they are hibernating, keeping them active and using up their energy reserves.

The fungus that causes white-nose syndrome, *Geomyces destructans*, was mostly likely introduced in this country before 2006. White-nose syndrome was first found in New York and spread to many other sites in the northeastern U.S., where it has decimated bat populations. Although European bats can show symptoms of white-nose syndrome with little to no chance of death, mortality rates have been as high as 99% in some U.S. populations. Luckily, the disease has not been found to affect humans or any other animals.

Bats are the main predators of night-flying insects, so are important to



Eastern pipistrelle, *Perimyotis subflavus*

Missouri's environment and economy. Many of the insects that bats eat are agricultural or forest pests. For example, corn ear-worm moths are eaten by several types of bats. Also, some bats may eat large numbers of mosquitoes. The 775,000+ gray bats that spend their summers in Missouri eat over 540 tons of insects per year (more than 223 billion bugs). And that's just one species! Some cave habitats rely on bats as a major source of nutrients through their droppings, or guano. Bats are also a food source for animals such as snakes, owls, and raccoons.

On March 14, 2012, in a Lincoln County cave, MDC biologists found a little brown bat with the fuzzy, white, fungal growth on the nose that is the classic sign of white-nose syndrome. The bat was sent to the National Wildlife Health Center (NWHC) in Madison, Wisconsin for examination. A nearby cave was also surveyed, and two tri-colored bats that were found with fungal growth were sent for examination.

The NWHC confirmed that all three of the bats had white-nose syndrome. These were the first confirmed cases of the disease both in Missouri and west of the Mississippi River. However, at this time, there are no documented deaths from white-nose syndrome in Missouri.

Over the last three winters, MDC bat and cave biologists have increased

their efforts in caves and mines throughout the state as a part of the white-nose syndrome surveillance effort and to improve our knowledge of Missouri's winter bat population prior to the arrival of the disease. In May of 2010, *Geomyces destructans* was found in two Missouri counties. Surveys of 29 hibernation sites in the winter of 2010 to 2011 didn't find any new appearances of the disease or the fungus. Last winter, 36 mines and caves across Missouri were surveyed.

The Department of Conservation is cooperating with other organizations, individuals, and agencies who are concerned about bats and caves to look for ways to minimize the impact of white-nose syndrome in Missouri. Currently there is no known cure for the disease, but we hope that by closely studying the rate that white-nose spreads and its severity we can assist with developing effective control measures.

—Tony Elliott, Resource Scientist

For additional information on white-nose syndrome and bats please visit these informative websites:

<http://mdc.mo.gov/node/4189>
<http://whitenosesyndrome.org/>
<http://www.batcon.org/>



Big brown bat, *Eptesicus fuscus*

Northeast Regional Office and Interpretive Center

3500 S. Baltimore, Kirksville, MO 63501 • mdc.mo.gov/node/279



The Northeast Regional Office and Interpretive Center is located just south of Kirksville on Hwy 63. Come inside to enjoy exhibits, attend programs, purchase permits, and pick up free conservation brochures. Head outside to walk the habitat trail or fish in the stocked pond.

HOURS:

Building:

Monday-Friday, 8 AM-5 PM

Trail and Pond:

Daily, 4 AM-10 PM

TO REGISTER FOR A PROGRAM:

Programs are free. Call 660-785-2420 to sign up for a program requiring registration. If you are unable to attend a program, please call and cancel as a courtesy to those on the waiting list.

October Events

Knee High Naturalists

Scampering Squirrels

Oct 1•Monday•10:30 AM

No registration, ages 3-6

Running up and down trees, chittering and arguing, squirrels entertain and amuse us with their antics. Learn about the life of a squirrel at this program.

Creature Feature

Reptiles Rock

Oct 10•Wednesday•1 PM

No registration, ages 7-12

From the quick lizard hiding under a rock to the turtle basking on a log, reptiles captivate our attention. Meet some live reptiles and discover what makes them unique at this program.



Caring for Plants After the Drought

Oct 11•Thursday•7-9 PM

No registration, adults

Wondering how to care for your drought-stricken lawn? Trees brown and scorched? The drought was hard on plants, but our workshop will help you care for your landscape. Presented by Yvette Amerman, MDC Resource Forester, and Jennifer Schutter, Horticulture Specialist-University of Missouri Extension.

Knee High Naturalists

Hairy, Not Scary!

Oct 15•Monday•10:30 AM

No registration, ages 3-6

People say bats are creepy, scary, and sometimes even dangerous! What do you think? Come along as we learn about bats—and maybe discover that they aren't so scary after all!

Conservation Keepers

Spider Sniffing

Oct 20•Saturday•8 PM

No registration, all ages

Sniff out spiders with us on the habitat trail! Bring your own flashlight or borrow ours as you learn to spot spiders in the dark.

Trapping Workshop

Oct 20•Saturday•9 AM-Noon

Registration required, all ages

This is a basic class on trapping furbearers. Multiple traps and styles of sets will be demonstrated. Dress for the weather. Rubber boots recommended. Presented by Outdoor Skills Specialist Rob Garver.

Creature Feature

Cave Creatures

Oct 24•Wednesday•1 PM

No registration, ages 7-12

Dark, damp, and just a little scary—who would want to live in a cave? Go spelunking with us to meet some critters that call caves “home sweet home.” (Don't worry, parents, our cave tour won't leave the classroom!)

November Events

Knee High Naturalists

Wiggly Worms

Nov 5•Monday•10:30 AM

No registration, ages 3-6

Get hands-on with nature as we discover earthworms! Join us in the lab as we learn how they crawl, test their preferences, and build a worm habitat. Please bring a 16 to 20 ounce plastic bottle for this program.

Creature Feature

What's In a Name?

Nov 14•Wednesday•1 PM

No registration, ages 7-12

Would you like a Lepidoptera in your flower garden? How about a *Turdus migratorius* at your bird feeder? What if I said a butterfly or a robin? Scientific names may seem confusing, but they play an important part in learning about nature. Join us as we name our own plants and find out just what's in a name.



Conservation Keepers

Birding Basics

Nov 17•Saturday•2 PM

No registration, all ages

Birding is one of the most popular outdoor activities. Join us to practice proper binocular use, get familiar with field guides, and take a short birding hike on the habitat trail.

Northeast Regional Office and Interpretive Center

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November cont.

Knee High Naturalists

Deer Diary

Nov 19•Monday•10:30 AM

No registration, ages 3-6

Come along as we discover the daily life of Missouri's white-tailed deer! We'll enjoy a story and make our own antlers at this program.

Creature Feature

Animal Senses

Nov 28•Wednesday•1 PM

No registration, ages 7-12

Sight, sound, smell, hearing, and touch—these are the five senses, right? Wildlife makes use of these five senses, but sometimes they have even more! Join us as we discover the amazing sensory abilities of wild animals.

December Events

Knee High Naturalists

Sensation Investigation

Dec 3•Monday•10:30 AM

No registration, ages 3-6

Have you ever heard the saying eyes like an eagle? What about being blind as a bat? Animals use the same senses we do, but they also have some extras! Investigate animal senses and how they use them at this program.

Deer Processing

Dec 5•Wednesday•evening

Registration required, ages 15 and under must be accompanied by an adult

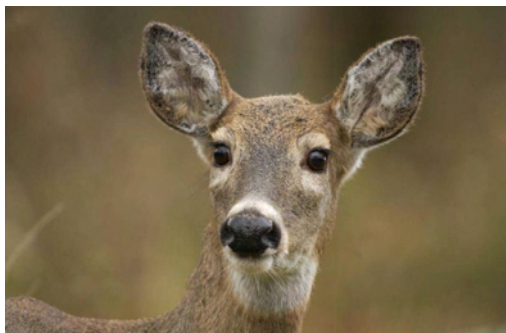
This class will include deer processing from field to freezer—from skinning and quartering to cuts of meat.

Holiday Nature Craft Night

Dec 12•Wednesday•6-8 PM

Register by Dec 10, all ages

It's time for our annual evening of holiday crafts. A wide variety of natural items will be available to make into tree ornaments, gifts, or bird feeders, so come enjoy this night out as a family!



Conservation Keepers

Animal Tracks

Dec 15•Saturday•2 PM

No registration, all ages

We may not always get to see wild animals when we take a nature hike, but we often see the tracks they leave behind. Learn to recognize some common tracks, practice identification on our nature hike, and make a track mold to take home!

Knee High Naturalists

Wildlife in Winter

Dec 17•Monday•10:30 AM

No registration, ages 3-6

The weather is colder and the days are shorter—winter is here! We make some changes in winter and so do wild animals. How does wildlife survive the cold winter?

Creature Feature

Survivor: Winter Edition

Dec 19•Wednesday•1 PM

No registration, ages 7-12

Winter can be a tough season—food is harder to find and temperatures get colder and colder. See if you've got what it takes to survive the winter as a wild animal at this program!



Wildlife Awards

Best sense of smell: Bears

Bears are said to be able to smell a food source from up to 18 miles away! Honorable mentions: Some dogs can sniff out cancer, and rats can be trained to detect landmines.

Best eyesight: Raptors

Eagles can spot a rabbit from miles away, and raptors will search for mice while flying 10-15,000 feet in the air! Honorable mentions: Insects are great motion detectors, while cats and owls have amazing night vision.

Best hearing: Owls

Owls can pinpoint the location of their prey using their hearing alone! Honorable mentions: Pigeons can map the ground they fly over using sound, while the tiger moth uses sound to disrupt a bat's echolocation.

Best sense of taste & touch: Catfish

The catfish is literally covered in taste buds! And some say they are so sensitive to vibrations that they can predict earthquakes! Honorable mentions: Flies and butterflies can taste with their feet, while the jewel beetle can sense a forest fire from miles away.

Special senses:

Bats use echolocation to navigate and catch prey.

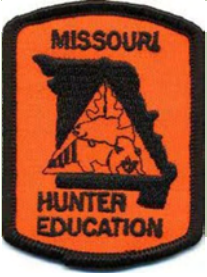
Bees can see ultraviolet light.

Some snakes have heat vision.

Some fish have electroreception.

Many animals can sense magnetic fields.

Hunter Education



Register online for all Hunter Education courses at
mdc.mo.gov/node/3722

A complete listing of courses is also included on this website.

These free 10-hour courses are required for anyone born on or after January 1, 1967, who wants to hunt with firearms in Missouri. Students ages 11 and up must pass a test at the end of the course to be certified. Students under 15 years old must be accompanied by an adult and show proof of age. If you have any previous Missouri hunting or fishing permits, or a Missouri Conservation Heritage Card, bring them to class.

Location	Date	Day/Time
Carrollton Fire Department	October 6	Saturday, 8 am-6 pm
Keytesville Fire Department	October 6	Saturday, 8 am-7 pm
Queen City Middle School	October 6	Saturday, 8 am-8 pm
Midway Farms, Howard Co.	October 6 & 7	Saturday, 8 am-5 pm Sunday, 1-5 pm
Shelbina Carnegie Library	October 8 & 13	Monday, 6-9 pm Saturday, 8 am-5 pm
Mark Twain Lake	October 12 & 13	Friday, 5-9 pm
MW Boudreaux Memorial Visitor Center		Saturday, 8 am-4 pm
St. Francisville Community Center	October 12 & 13	Friday, 6-10 pm Saturday, 8 am-4 pm
Green City-City Hall	October 12 & 13	Friday, 6-9 pm Saturday, 8 am-4 pm
Canton High School	October 19 & 20	Friday, 5:30-8:30 pm Saturday, 8 am-3:30 pm
Ewing Firehouse	October 19 & 20	Friday, 6-9 pm Saturday, 9 am-5 pm
Novinger Firehouse	October 19 & 20	Friday, 6-9 pm Saturday, 8 am-5 pm

Hunter Education Instructor Training

You can help continue the tradition of safe hunting practices in Missouri by becoming a Hunter Education instructor. Training will take place on October 2, 2012, at the Hannibal MDC office located at 653 Clinic Rd., Hannibal, MO 63401. You must be 18 or older to participate. Contact Rob Garver at 660-785-2420 to register for the class.

Nature Craft Night



Wednesday
December 12, 2012
6-8 pm

It's time for our annual evening of holiday crafts. A wide variety of natural items will be available to make into tree ornaments, gifts, or bird feeders, so come enjoy this night out as a family!

Space is limited, so please register by December 10, 2012, at 5 pm by calling 660-785-2420.

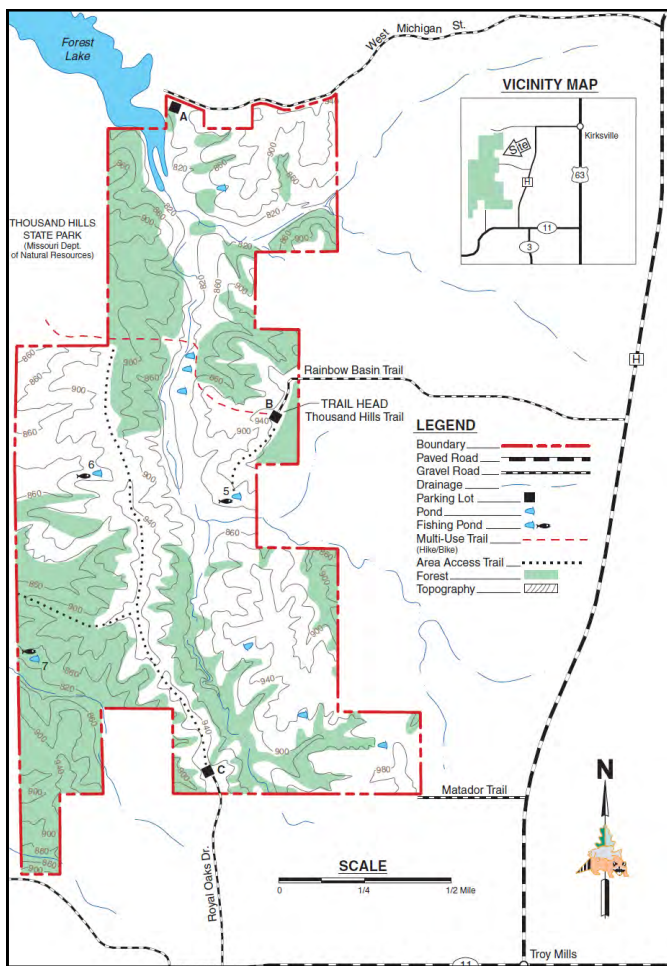


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Places to go: Big Creek Conservation Area

Big Creek Conservation Area is located in Adair County just west of Kirkville. You can access Big Creek CA from Rainbow Basin Trail, West Michigan Street, or Royal Oaks Drive. About half of the 1064 acres that make up the area are wooded, rolling hills. The rest is a mixture of savanna, grasslands, and food plots. The area is named for the intermittent stream that runs through it.

Big Creek CA is a great hiking and biking destination. Although the trail through the area is only about 7/10 of a mile, it is just the beginning of the Thousand Hills Trail. The trailhead at the Rainbow Basin Trail parking area lets you hike or bike from Kirkville to Forest Lake, giving you plenty of opportunities to view wildlife.

Walk-in and backpack camping are allowed on the area, except during firearms deer and turkey seasons. You can also pitch a tent at one of the parking areas, but be prepared for primitive camping—there are no amenities here!

The three fishing ponds located at Big Creek CA provide the opportunity to catch largemouth bass, channel catfish, or sunfish. Hunting is allowed during statewide seasons, but only archery and muzzleloading methods can be used.

Whether you want to watch birds, challenge yourself physically, or catch a few fish, Big Creek Conservation Area has what you need!



Northeast Nature Notes is available by mail, e-mail, and on the MDC website.

To be added to the mail or e-mail registry, or to switch from one to the other, please contact Amanda Moore at amanda.moore@mdc.mo.gov or call 660-785-2420.

The online version of the newsletter is available at mdc.mo.gov/node/17875.

A full event calendar for the Northeast region is also available on the MDC website.